Amendments to the Specification:

Please replace the paragraphs on lines 10-34 of page 5, with the following amended paragraphs:

In Fig. 1, a simplified communication environment 102 embodying the present invention is shown. The communication environment 102 includes a radio transmitter 104 in radio communication with a radio receiver 106. In other words, the radio receiver 106 receives a target signal 108 from the radio transmitter 104. The radio receiver 106 processes the target signal 108 and conveys the information contained therein to the user. It may be possible that the transmitter 104 can also receive radio signals and that the receiver ~~108~~ 106 can also transmit radio signals, but for purposes of this invention only the signal from the transmitter to the receiver is described. Furthermore, it is contemplated that in a particular embodiment of the present invention the radio transmitter 104 is a cellular base station and the radio receiver 106 is a cellular mobile unit, such as a cellular phone.

The environment 102 includes an interferer 110 which transmits an interference signal 112 received by the receiver ~~108~~ 106. The interference signal 112 is undesired radio transmission outside the communication system between the transmitter 104 and the receiver 108. For example, the interferer 110 may be a cellular phone in close proximity to the receiver ~~108~~ 106 or a cellular base station within the communication environment 102. Furthermore, the interference signal 112 is similar in frequency range to the target signal 108, thereby causing the receiver 106 to receive both the interference signal 112 and the target signal 108. Although only one source of interference is shown in Fig. 1, it is understood that the interferer 110 can represent multiple sources of interference within the communication environment 102.

Please replace the paragraph on lines 11- 18 of page 8, with the following amended paragraph:

Returning back to Fig. 2, the reduction in headroom is effectuated by the first digital filter 218, which attenuates the digital signal 215 when the magnitude of the interference signal 112 increases beyond the target signal 108. The attenuated digital signal drives the amplifier control signal ~~216~~ 214, thereby increasing the gain of the amplifier 210. Since the magnitude of the analog signal 208 is increased, the headroom is decreased. By decreasing the headroom the digital accuracy of the target signal 108 is increased.

Please replace the paragraph that starts on lines 35-38 of page 8 and continues to lines 1-2 of page 9, with the following amended paragraph:

At converting operation 404, the amplified signal is converted to a digital signal. The digital signal is a digital representation of the amplified signal, such as a Binary Coded -Decimal (BCD) representation. For example, a 6-bit ADC may be used to convert the amplified signal to a 6-bit digital signal. Once the converting operation 404 is completed, control passes to filtering operation 406.